Final Abstract Number: 44.008
Session: Pediatric & Perinatal Infections
Date: Thursday, June 14, 2012
Time: 12:45-14:15
Room: Poster & Exhibition Area

The clinical characters of acute flaccid paralysis associated with enterovirus 71 infected hand-foot-mouth disease

Z. Yingxue, F. Hongna*, G. Yongsheng, W. Bo

Tianjin Children's Hospital,China, Tianjin, China

Background: Hand-foot-mouth disease (HFMD) outbreaks in young children in recent years. A significant increase in the number of HFMD cases in China over the last 4y has made the public prevention and therapy of this disease a critical issue. Enterovirus 71 (EV71) was the major causative agent of the HFMD outbreak inTianjin.Our objective is to analyze the clinical characteristics of acute flaccid paralysis (AFP) caused by EV71 HFMD.

Methods: 10 cases HFMD (6 male, 4 female) complicated with AFP were enrolled. The clinical manifestations were observed meanwhile the etiological results, spinal cord MRI findings, clinical electroneurophysiology findings cerebrospinal fluid were collected. The recoveries of their impairment in limb extremities were followed up for 2 or 3 months.

Results: AFP associated with enterovirus 71 infected HFMD was particularly prevalent in children less than 2 years old, all of whom had skin rash and fever. 70% of the cases had acute paralysis with single limb. Muscle power was initially improved in a week. All cases got obvious recovery in hospital and mild paralysis could recover in 1 or 3 months. Findings of MRI and electroneurophysiology were in highly accordance with clinical symptoms, both can provide the basis of focal neurological signs. Being followed up for 2 or 3 months, all children′s myodynamia of paralysis limbs gradually recovered, 7 cases (70%) return to V grade.

Conclusion: CNS involvement is the serious complication caused by EV71 infection and EV71 may be the great virus of non-polio enterovirus (NPEV). MRI and electroneurophysiology have important value to evaluate patients′ condition and prognosis. In acute stage, mortality and disability rate can be reduced effectively by all-around and actively intreatment. It is effective in clinical observation by combined treatment with intravenous immue globulin (IVIG) and glucocorticoid.

http://dx.doi.org/10.1016/j.ijid.2012.05.775

Final Abstract Number: 44.009
Session: Pediatric & Perinatal Infections
Date: Thursday, June 14, 2012
Time: 12:45-14:15
Room: Poster & Exhibition Area

Clinical effectiveness of three-combination probiotics therapy in pediatric patients with salmonella and rotavirus gastroenteritis: randomised clinical trial

Y.F. Huang*, P.-Y. Liu, K.-S. Hsieh

Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan, R.O.C

Background: Including our previous report, several studies show that rotavirus infection and salmonella infection are the leading causes of infectious gastroenteritis. Quantitative Vesikari scales and qualitative severe diarrhea (Vesikari scale≥11) approaches were used to grade the severity of salmonella and rotavirus gastroenteritis and post-hospital days were used to evaluate the efficacy of three-combination probiotics (BIO-THREE®).

Methods: A single-center, open-label, randomized, controlled trial was conducted to collect 159 patients aged 3 months to 14 years and hospitalized with infectious gastroenteritis between February 2009 and October 2010. After written informed consent was obtained, subjects were randomized to receive conventional treatment or add-on treatment of the probiotics to the conventional treatment.

Results: 159 patients were enrolled in the study. According to the treatment, 82 children were randomized to the treatment group and 77 children to the control group; according to the pathogen identified, 48 patients were then grouped into the Salmonella group, 42 to the Rotavirus group and 69 to other AGE group. Total duration of diarrhea was significantly shorter for children receiving Bio-three® ($p< 0.0001$). After Bio-three® was offered, all the patients in the treatment group demonstrated significant improvement at day 5 and 7 ($p < 0.05$, respectively), patients with severe diarrhea (vesikari scale≥11) in all three pathogen sub-groups began to show significant improvement from day 3 ($p < 0.01$), the Vesikari scale of patients in the Rotavirus group was significantly improved at day 5 ($P = 0.04$), and no severe diarrhea was found in the salmonella group at day 5 and 7 ($p = 0.49$).

Conclusion: In conclusion, seven days of Bio-three® demonstrated high efficacy and safety to infants and children patients with severe gastroenteritis and the incidence of severe gastroenteritis was significantly reduced in the rotavirus-originated group.

http://dx.doi.org/10.1016/j.ijid.2012.05.776